

Claims

1. A well jet device for logging horizontal wells comprising a ring, which is arranged on the lower section of a casing string, with a stepped through channel intended for installing a sealing unit, a smooth tubing string with a jet pump installed on it, in the body of the said jet pump an active nozzle and a mixing chamber with a diffuser are arranged as well as a channel for supplying an active medium, a channel for supplying a medium pumped out of a well and a stepped through channel are made, the latter channel being embodied in such a way that it is possible to install therein either a blocking insert having a through channel and serving for closing the channel for supplying an active medium or a depression insert which, when installed, closes the tubing string in its cross-section, a logging device is arranged on the lower end of the tubing string, a sealing unit is put on the tubing string between the logging device and the jet pump in such a way that the sealing unit may be axially moved relative to the tubing string, and the lower section of the tubing string above the logging device is made perforated.

2. A method of operating a well jet device for logging horizontal wells consisting in installing the ring with the stepped through channel into the lower section of the casing string, then the jet pump with the stepped through channel made in its body and the logging device installed on the lower end of the tubing string and arranged below the jet pump are lowered into the well on the smooth tubing string, the perforated section is made in the lower end of the tubing string, and the sealing unit, movable relative to the tubing string, is preliminarily put on the tubing string between the logging device and the jet pump, background values of the production formation physical parameters are registered with the use of the logging device in the process of lowering, then the sealing unit is arranged in the stepped through channel made in the ring, and the logging device is arranged in the area of production formations, afterwards a depression insert is installed into the stepped through channel made in the body of the jet pump, thus separating the tubing string, and an operating medium is fed over the tubing string to the nozzle of the jet pump, thus creating a series of different-value depressions in the well below the sealing unit, at each depression value the well flow rate is measured and the bottom-hole pressure is registered, then, when the jet pump is in operation, the logging device is moved along production formations by moving the tubing string

together with the jet pump relative to the sealing unit, and the geophysical parameters of production formations and the formation fluid coming into the well are registered; when the study is completed the tubing string is raised to the surface together with the jet pump, the sealing unit and the logging device.

3. The method of operating according to Claim 2, characterized in that after registration of the geophysical parameters of the production formations and the formation fluid coming into the well additional measurements of the geophysical parameters are made when the jet pump is stopped.

4. The method of operating according to Claim 2, characterized in that after registration of the geophysical parameters of the production formations and the formation fluid coming into the well an additional study of production formations is carried out, for which purpose chemical agents are pumped into the well over the tubing string through its lower perforated section, and a chemical treatment of the near-borehole area in the production formations is carried out, in such a case the depression insert is removed from the stepped through channel made in the body of the jet pump and substituted by a blocking insert with the axial through channel.